Discussion and Remarks

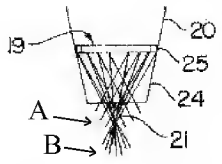
In the cited references, Wilson (6,158,165) has configured the wires 21 in an interleaving configuration (lines 31-33, Pg. 3). The interleaving wires 21 provides a plurality of gaps through which the insect can push aside (line 9, Abstract) to enter a confined chamber.

The applicant's device comprises a plurality of deflectable strips 20, linked together by a plurality of short flexible strips 90 (first page of Detail Description, line 15, or Fig. 2). The strips 20 are effectively interlinked by the short strips 90 to form a complete enclosure, so that a trapped insect cannot push and squeeze through the strips 20 to escape. The applicant's device is therefore very different from the Wilson's device. The applicant's device is configured to prevent an insect to escape from the trapped chamber.

The applicant's device is an improvement over the Wilson's device. The Wilson's device has a deficiency that would have allowed a trapped insect to escape from the entrapment. Wilson's device allows the insect to push aside the interleaving wires 21 to enter the chamber, it is equally possible that the trapped insect can escape by pushing aside the wires 21 from within the chamber.

The Wilson's device, which uses interleaving wires 21, may be considered a porous confinement, which is ineffective to prevent an insect from escaping. Indeed, the gap between the space-apart wires 21 in the Wilson's device can be enlarged without a limit by a desperate insect. Since there is no restraining mechanism to restrict the movement of the interleaving wires 21, the interleaving wires 21 can be pushed by the trapped insect into any shape, other than the one originally intended. Thus, the configuration of the Wilson's device is not practical in its usage against the trapped insects.

A partial view of Wilson's Fig. 5 is shown on the right side of this paragraph. In the Wilson's device, the interleaving wires (21) converge at a point A before diverging out near the region B as shown in the diagram. It is likely that the insect would depart sooner rather than later after passing by the bottom end of the enclosure (24) before continuing to proceed to the point A. The insect would push through the gaps between the interleaving wires (21) into the trapping chamber. The gaps between the interleaving wires (21) would become visually smaller if the insect continues to crawl toward the converging point A in Fig. 5. The insect is more likely to choose a bigger gap than a smaller gap to push itself into the trapping chamber.



Wilon's Fig. 5 (part)

As explained in the diagram above and the Wilson's own statement about the effort by the insect to push aside the wires 21 in order to enter the chamber, the Wilson's device has failed to function in the way similar to what has been described in the applicant's specification, i.e. the departure of the insect should only occur at the end of the crawl path. The departure should not have occurred before the insect reaches the end of the crawl path.

Because of its structural deficiencies, the Wilson's device has failed to provide a way to ensure that an opening would be created at the end of the wires 21 from which the insect would depart. The insect would only see that the gaps between the interleaving wires 21 become smaller as it crawls along the wires 21. The insect would naturally choose a bigger gap to enter the chamber, rather than the smaller gaps further down the path of wires 21. Thus, the Wilson's device has a deficiency in the configuration which does not lead an insect to crawl all the way to the end

of the interleaving wires 21.

Furthermore, any one of the interleaving wires 21, which is configured without a restraining means at the distant end of each wire 21, can be pushed away by a trapped insect to create a bigger hole. There is no limit to the size of the hole, since several interleaving wires 21 can be pushed away at the same time. Wilson's device has unfortunately permitted a trapped insect to escape, since the insect can push away the wires 21 to escape.

In short, the Wilson's device does not provide the necessary structure to ensure that the insect would depart at the end of the crawl path, this is in direct contrast to the place of departure specified in the amended claims appended herewith. The structure of the Wilson's device is incomplete for an efficient operation to trap the insects. For example, it does not have a restraining mechanism to limit the movement of any one of the wires 21, allowing the distant ends of the wires 21 to move freely. Any one of the interleaving wires 21 can be pushed away to create a bigger hole as explained above. The interleaving and space-apart wires 21 is a porous confinement for the insects. The Wilson's device may be considered ineffective as a practical device to contain a trapped flying insect from escaping the chamber of confinement.

After a careful reading of the Wilson's patent, it is clear that the Wilson's device is completely unsuitable for use to trap a flying insect, such as a housefly 330 as indicated in the specification. The fly 330 can easily push aside the interleaving wires 21 in the Wilson's device.

Indeed, Wilson has anticipated that a trapped insect could escape from his device, and he has stated that (line 38-46, Pg. 1),

> "The passage can be constructed to impede the escape of captured subjects by providing a smooth-walled surface inclined so that the exterior opening of the passage is elevated above the interior opening of the passage, whereby subjects attempting to escape slip on the smooth-walled surface and are urged downwardly into the container by the inclination of the passage. Preferably, the passage is oriented substantially vertically so the effect of gravity is maximized."

The Wilson's device is therefore not suitable for a flying insect 330, which would have simply escaped and flied away from the Wilson's device.

The barrier formed by the interleaving wires 21 in the Wilson's device can be easily broken down by a trapped insect by pushing and enlarging the gaps between the interleaving wires 21 as stated above. The Wilson's structure, which is in fact a porous barrier formed by the interleaving wires 21, is different from the complete and effective enclosure employed in the applicant's device. The applicant's device has provided a unique crawl path, which would immediately disjoint from the enclosure upon the landing of an insect. The interleaving wires 21 in the Wilson's device is configured so that the crawl path does not immediately separate from the enclosure. Worst of all, the insect would choose a bigger gap between the interleaving wires 21 to push through to get into the chamber, according to Wilson's own statement about the action of a push (line 9, Abstract). The Wilson's wires 21 are not properly configured to achieve a desirable result that the insect would depart at the distant end of the crawl path.

The Examiner suggests that the claims include a crawl path which is to be formed by a set of twisted deflectable strips. The applicant thanks wholeheartedly the Examiner for the valuable advice. The applicant has incorporated such a

limitation in the claims appended below.

The applicant is also exploring the possibility of choosing Fig. 4 to be the elected species. Fig. 4 provides a clear and unambiguous picture about a wall enclosure which would have blocked the attempt by a trapped insect to escape.

Proposed amended independent Claim 80, which provides a complete confinement to prevent a trapped insect from escaping, is configured to overcome the shortcomings of the Wilson's device identified as shown above.

Proposed amended Claim 81 uses twisted strips to form a crawl path. The applicant thanks the Examiner for this valuable suggestion.

Proposed amended Claims 82, 86 and 88 are dependent on amended Claim 80.

Proposed amended Claims 83-85 and 87 belong to different species. The applicant requests a delayed examination of Claims 83-85 and 87, until the independent amended Claim 80 is allowed.

Proposed amended independent Claim 89 employs a complete enclosure enclosing a crawl path which is formed by a set of twisted deflectable strips.

Proposed amended Claims 90, 93-94 are dependent on amended Claim 89.

Proposed amended Claims 91-92 and 95 belong to different species. The applicant requests a delayed examination of Claims 91-92 and 95, until the independent amended Claim 89 is allowed.

Proposed amended independent Claim 96, which employs a complete enclosure to enclose a deflectable crawl path, includes a plurality of tines mounted outwardly from the enclosure.

Proposed amended Claim 97 uses twisted strips to form a crawl path, which is a feature distinctively different from the Wilson's device, as noted by the Examiner. The applicant thanks the Examiner about the distinct feature.

Proposed amended Claims 98 and 99 belong to a different species. The applicant requests a delayed examination of Claims 98 and 99, until the independent amended Claim 96 is allowed.